

Corruption in international sports and how it may be combated

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Abstract

This contribution attempts a delimitation of the concept of corruption in sport and gives an overview of topical instances. It is thereby demonstrated why the definition of corruption in sport is especially problematic. The causes of the corruption and their social costs are analysed. The anti-corruption measures of the Amateur International Boxing Association (AIBA) and the German Football Association (DFB) are described. These are based on two fundamentally different approaches and can be regarded as representative of many anti-corruption measures in sport.

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First of all, most accusations of corruption in sport should not be taken too seriously. When athletes lose, they tend to look everywhere else for the blame rather than at themselves. Dishonest wheelings and dealings of their opponents, such as corruption and doping, may also be readily cited as an excuse. When fans see their team lose, the accusation of rigging always quickly arises.

From there, especially in sport, we should speak of “facts” only, when there are legally binding decisions – and not reports cases in which there are merely suspicious circumstances. Nevertheless, from the economic viewpoint, there is an aspect that favours dealing explicitly with the suspicious circumstances: the actual corruption in a society is positively dependent upon the mechanism of “self-fulfilling prophecies” from the generally perceived or felt corruption. A perception of widespread corruption lowers one’s own moral bounds. In this respect, the following remarks should also apply in cases in which there are no legally binding decisions but merely suspicious circumstances.

In the following, Section 1 attempts a delimitation of the concept of corruption in sport and gives an overview of topical instances. It is thereby demonstrated why the disassociation of corruption in sport is especially problematic. In Section 2, the causes of the corruption and their social costs are analysed. In Section 3, the anti-corruption measures of the Amateur International Boxing Association (AIBA) and the German Football Association (DFB) are described. These are based on two fundamentally different approaches and can be regarded as representative of many anti-corruption measures in sport. Section 4 provides a summing-up and outlines to what extent the typical way in which measures are taken in sport may be expanded through efficient measures from an economic viewpoint.

1 Forms, tendencies and the extent of corruption in modern sports

In the following discussion corruption in sport is understood as

- behaviour by athletes who refrain from achieving the levels of performance normally required in the sport in question to win the competition and instead intentionally permit others to win, or

- behaviour by sporting officials who consciously perform their allocated tasks in a manner at variance with the objectives and moral values of the relevant club, association, competitive sports in general and/or society at large,

because they receive or expect pecuniary or non-pecuniary advantage¹ for themselves (or, in case the person in question is acting as an agent: for a principal, e.g. acquaintances, relatives and/or associated sports institutions) from the person favoured by the action (or their acquaintances, relatives and/or associated sports institutions).²

Having defined corruption in sport, it has to be admitted that it is nothing new. The first documented case of corruption in international sports is attributed to the athlete Eupolos of Thessalia who successfully bribed three of his competitors in the fist combat tournament at the Olympic Games of 388 B.C., among them the reigning Olympic champion Phormion of Halikarnassos.³ There are also records of an early case of corruption in sporting management and administration. In 12 B.C. Damonikos of Elis, father of the Olympic wrestler Polyktor, attempted to bribe Sosandors, in order for him to persuade his son of the same name to concede victory in the Olympic wrestling competition to Polyktor. In sum however, a mere handful of cases of corruption in the ancient Olympic Games, held over a period of about a thousand years, are documented.⁴ Nevertheless, according to the account supplied by Philostratos, corruption seemed to be quite widespread in the sporting world of that time, at least outside of the ancient Olympics (Decker 1995, 152).

Maennig (2005) offers an overview of the most important documented cases of or attempts at corruption in modern sport of the 20th century, with the majority of corruption cases allocated into two distinct categories. Table 1 enumerates some of the most prominent cases of corruption (attempts) since 2005.

Corruption attacks in international sports relate to the exertion of a delinquent influence on the one hand over

¹ In connection with the IOC scandal the differentiation between bribes based on reciprocity and gifts is an important one. The differentiation is problematic, nonetheless, cf. Tanzi (1998, 9).

² For attempts at alternative definitions cf. Theobald (1990) and Bardhan (1997, 1321) on the remaining difficulties of delimitation.

³ According to the rules of the Olympics of that period, the title of Olympic champion could not be taken away once awarded. Eupolos's name remained on the official list of Olympic victors, cf. Weeber (1991, 118).

⁴ Cf. for a description of the cases of corruption in the classical Olympic Games, as well as for references to the primary literature, Jüthner (1965), p. 94 and 188, Drees (1967), p. 58 et seq, 155, 189, Bengston (1971), p. 80 and 84, Weiler (1985/86 and 1989), Weeber (1991), p. 59 et seq. and 115 as well as Decker (1995), p. 150 et seq. My thanks to Manfred Lämmer for the relevant references to the literature.

- management decisions by sporting bodies and sports officials (referred to henceforth as “management corruption”), and in particular regarding
 - host venues for important competitions,
 - allocation of rights (e.g. for televised transmission),
 - nomination for positions (including honorary positions)
 - commissioning constructions works for sports arenas and other venues, as well as on the other hand over
- competition results (“competition corruption”), whereby the provider and the recipient of the bribes can be
 - athletes only
 - sporting officials and other non-athletes only (sometimes without the knowledge of the athletes involved)
 - athletes and officials.

We can however usefully relativise the definition, categorisation and determination of the actual extent of corruption.

- A clear definition of corruption is difficult in any case, even without the sporting connection.⁵ The concept of corruption is interpreted differently from nation to nation (and from continent to continent); various types and forms exist, which need to be analysed in different ways.⁶ The case of the Tour de France represents a particularly

⁵ Lowenstein (1985) attempts a delimitation with: “...the crime of bribery is the core of a series of concentric circles representing the degrees of impropriety in official behaviour”. Cf. also Ruff (1977) on the difficulty of an unambiguous legal definition. Paragraphs 331 to 337 of the German Criminal Code threaten public servants and judges with legal penalties if they indulge in “ the acceptance of material advantage” (in the performance of their duty), “corruptibility” (accepting bribes for dereliction of duties), “granting of material advantage” and “bribery” (the relevant active processes) . The penal codes of other nations are similar in this respect. Other forms of corruption are rarely penalized.

⁶ Cf. Bac (1998) and Tanzi (1998), p.9 et seq.

Table 1a: Corruption – (suspicious) facts / Soccer matches

2008	Poland	28 clubs suspicious to be involved corruption. Minister of Sport demands retirement of board of directors of polish football federation. Second division coach Darius Wdowczyk arrested
2008	Africa-Cup	30.000 \$ offer for match manipulation received by namibian national team players
2007	Great Britain:	team manager and CEO of FC Portsmouth (1 st division) arrested
2007	Poland	Minister and federation controllers arrested
2007	Europe	UEFA investigates on 15 cases of manipulated matches
2007?	China:	„no non-manipulated soccer league match“
?	Great Britain	bribes from player´s agents to coaches
until 2006	Italy	Manipulations at 8 out of 20 clubs in first division
until 2006	Serbia-M.:	approx. half of all "Superliga"-matches suspicious to have been manipulated
until 2006	Great Britain	3 Premier League clubs suspicious to have manipulated matches
until 2005/6	Germany/ Austria	New allegations in german second division and against Sturm Graz
2005	Belg., Finnl. France, NL	Chinese Zheyun Ye systematically manipulates clubs to maximise betting income
2005	France	players of FC Metz receive offer for manipulation
until 2005	Brasilien	FIFA-referee Periera de Carvalho receives up to 5550 € per manipulated match
until 2005	Germany	3 croatian wagerer bribe referees, players and functioneers
2004/05	Poland	Manipulations of several matches.
2004/05	Turkey	National team player Karadeniz manipulates several matches
2004	Russis/ Lettl.:	Allegations against russ. Soccer federation
until 2004	Italy	FC Genua buys victory against AC Venedig
until 2004	Portugal:	150 Persons from 10 Clubs of 1., 2. And 3. Ligue manipulate
until 2004	South Africa	34 of the 40 best qualified referees manipulate first division
until 2004	Tch. Rep:	Referees manipulate in charge of 14 out of 16 first division clubs

Table 1b: Corruption – (suspicious) facts / outside of soccer

Official positions:

- Until 2003, South Korea: sale of NOC memberships
- Until 2006: WTF-officer Yoo sales „international referee certificates“ for 50 Mio. Won

Membership to National teams

- Equestrian sport

Agencies

- New Soccer players´ agency in Germany to fight corruption

Location of federations:

- 2006, Chungwon Choue, President WTF rents his mother´s estate as WTF domicile for 700.000 \$ p.a

Location of competitions:

- 2004: succesful orchestration of bribery for London 2012 against IOC-member Slawkow
- 2005: Blair´s talks with some 40 IOC-Officials re London 2012

Construction of sport facilities:

- 2002/3: Allianz-Arena München
- Hockenheim-Ring
- Düsseldorfer Stadion

TV-transmission:

- Attorney asks for imprisonment for up to 4 ½ years for ISSM officials who bribed international sport officials
- 2003-5: MDR / Techem + Dt. Sporthilfe
- Until 2004: HR / several german federations

Promotional rights:

- Until 2004: Formula One/ Infineon/ BF Consulting

Manipulations outside of soccer

- Cycling:
 - 100.000 € for etape victory at Tour de France
 - Lemond sollte für Verzicht auf Angriff auf Hinault 1 Mio € bekommen
- 2007: Bet scandal in NBA
- 2002-2004: Galopprennen in GB
- Schach, Deutschland/ Russland 2004
- Tennis, worldwide
 - 5 italian Tennis-Profis baned and punished with fines because of betting

- On permanent basis: National chinese Games: Judo, Taekwon-do, Boxing, Rhythmic Gymnastics
- Boxing, Olympic Games 2004: Thailand
- Badminton, Olympic Champion 2004 Zhang Ning owes her medal to a team internal arrangement. Similar practices in table-tennis

Other

- Did WTF Vize President Indrapana envelope with money?
-

clear example of the way in which the definition of a particular behaviour as “corruption” depends on the rules of the association or the attitudes of society. In contrast to the beginning of the 20th century, nowadays for a team member to race a leg of the tour “for the captain” of the team is considered perfectly normal, generally acknowledged and in conformity with the rules. In sporting events other than cycle racing, behaviour of this kind has yet to be accepted by society. An example of this was the “team order”⁷ in the Ferrari Formula 1 team at the Austrian Grand Prix of 2002, when Rubens Barrichello let his team-mate Michael Schumacher overtake him just before the finishing line.

In addition the partially accurate accusations that the decision to host the 2006 Football World Cup in Germany was “helped along” via the arrangement of financially lucrative friendly games between FC Bayern Munich and teams from Thailand, Tunisia, Trinidad and Malta also serves to highlight the problems in differentiating between “internationally acceptable”⁸ gestures of friendship and gifts on the one hand and corruption on the other.

The accusation directed towards the world boxing associations and their athletes and officials, that places in the world rankings have been sold and/or that title fights with non-listed athletes have been arranged in exchange for bribes, is also of significance in connection with the definition of the term corruption. If such world boxing associations are regarded as “normal” sporting associations, whose main concern is to systematically attain a list of the best athletes via competition results, then the behaviour in question should clearly be seen as corruption. If by contrast such associations are regarded as business enterprises that maximize their own incomes and those of their members by, amongst other things, being paid to organise sporting events with (television) spectators and heavily-sponsored athletes at suitable venues on the basis of “rankings”, then the above-mentioned payments could also be regarded as a normal form of income. This applies particularly when the objectives and behaviour of this kind of association are public knowledge.⁹

⁷ “Team orders” can be related to corruption is as much as by adhering to them, an athlete refrains from achieving a better result in order to retain his or her well-paid place in the team.

⁸ On fighting off allegations of corruption by Franz Beckenbauer, President of the O.C. of the 2006 World Cup and his vice-president of the time Fedor Radman cf. N.N.. (2003c).

⁹ Anyone interested in the sport can and indeed must be aware of such behaviour; cf. Riess (1984, particularly pages 349 onwards), Graham (1999) and N.N. (2004a).

- As far as the categories of corruption on sport are concerned, two tendencies are obvious. On the one hand, at least within the cases of competition corruption that have come to light, competition judges and other officials are increasingly becoming involved in corruption, whilst, in contrast to previous eras, athletes and trainers are directly involved less frequently. On the other hand a tendency towards an increased number of cases of management corruption in sport can also be observed (see Maennig 2005 for more details).

Within the field of management corruption there is also a diversification into new areas of activity. Early in the year 2004, for example, the South Korean official Kim Un-Yong, among his many official posts also Vice President of the International Olympic Committee, became the subject of investigations due to allegations of having received a total of some € 333,000 from other officials, who in return were allegedly accepted as members of the National Olympic Committee of South Korea. Since then, Kim has been sentenced to two and a half years imprisonment.

In connection with the construction of the new football stadium for Bayern Munich and TSV Munich 1860, currently under way at the time of writing, a number of members of the club's management team – now dismissed - are alleged to have received bonuses of some € 2.8 million for passing on inside information to the Austrian construction firm Alpine-Mayreder Bau Salzburg GmbH, enabling it to make a successful tender for the construction works worth over € 280 million. Alpine-Mayreder has meanwhile confirmed that on the successful conclusion of the deal it was prepared to pay “an arrangement fee” to those “who drew the attention of the management to this prestigious project and who put us in touch with a highly creative team of architects”, yet considers this behaviour to be “neither legally problematic nor dishonest”.

Furthermore, in connection with the allocation of the rights for the TV marketing of the 2002 and 2006 football World Cup Championships, allegations have also surfaced concerning the payment of bribes to association officials (Hartmann, Jeske, Weinreich 2004, 45). So far however these allegations have had no legal consequences.

It should also be mentioned that “modern public relations” mean that sports clubs and associations tend to treat journalists in a way that, at the very least, brings with it the danger of corruptive effects. Thus for example selected journalists, whose subsequent articles are closely scrutinized, receive flights in the private jets of sponsoring

companies to games, as well as generous food and lodging at the sponsors' expense.¹⁰ So-called PR advertisements, i.e. paid articles, which at first glance seem indistinguishable (or at least hard to distinguish) in terms both of appearance and content from other normal articles, are not unusual, particularly in connection with large-scale sporting events. In the case of some major events such as the Biathlon World Championships, the main sponsor has in the past paid for (overpriced) advertising on the sports pages to ensure "adequate" coverage of the event. However this is a phenomenon that not only affects sport but also industry, etc., and which for this reason should be dealt with at greater length in an analysis of corruption in the media.^{11,12}

The cases discussed here, in which corruption in sports is used to attain certain positions (honorary or otherwise), influence the allocation of television or other rights, or acquire construction contracts, represent "innovations", which until recently were considered unthinkable. It seems possible that all the areas of activity relating to sport will in future be affected by corruption, in as much as this has not happened already. For this reason alone the categorisation of corruption given above can have no claim to completeness.

- As for the extent of corruption in sport, we must assume that the known cases merely represent the tip of the iceberg. In industrialised countries such as Germany, 5% at most of corruption cases are brought to light (Bannenberg and Schauensteiner, 2004). This figure, which is specific to corruption, corresponds well with the estimation that the level of undiscovered cases of crimes in the economy as a whole can (implicitly) be as high as 96% in some areas¹³ and is thus estimated to be higher than for other types of

¹⁰Not only in sport however is the special treatment of journalists a common practice. Hotels and automobile manufacturers for example often offer special conditions. In conversation with Hansjörg Elshorst, the Chair of the German Chapter of Transparency International and Stanislas Cutzach, Officer, Governance Structures, my conversation partners were of the opinion that these practices, which are also widespread in Germany, cannot be regarded as corruption as long as the discounts are granted to all journalists without regard to the contents of their publications..

¹¹ A similar case can be seen in the malpractice in Brazilian football from the end of the 1990s until the year 2001 (Kfoury, 2001). This involved players receiving passports with falsified details on age and nationality, in order to obviate international football regulations. Strictly speaking, these represent cases of fraud in the field of sports. Corruption may have occurred among the passport authorities, if staff members made the changes intentionally and in return for favours.

¹² In the context of sports, the media and corruption it is also worth taking note of the investigations currently underway at the "Hessischer Rundfunk" broadcasting company in Germany, where accusation have been made against the former head of sports coverage in connection with his over-zealous use of the system of co-financing. This system, which is not unusual in sports coverage, involves sponsors for example, or the event organisers themselves, making payments to the television companies in order to ensure television coverage. In this case, sponsors who were clients of the agency belonging to the head of sports' wife, are also alleged to have received preferential coverage in sports reports, cf. N.N. (2007).

¹³ Cf. N.N. (2003b). The figures for Germany given by Rügemer (1996) lead us to assume a high level of undiscovered cases of general corruption.

crime.¹⁴ Assuming that the level of undiscovered cases prevalent internationally and in sport are comparable, this would imply that the actual extent of corruption in sport is greater than reported. This assumption would seem reasonable particularly because those continents or sub-continents that are regarded in the discussion on corruption as being particularly affected by the phenomenon, i.e. Africa, South America¹⁵ and Asia, hardly appear in reports on corruption in sports.

Nevertheless this should not be interpreted to mean that the problem of corruption in sport is a particularly great one, going beyond the dimensions of corruption in other areas of human endeavour. Rather, and in spite of all problems of quantification (Tanzi, 1998) in the ascertainment of the extent of non-sporting corruption, even for relatively trustworthy countries, the opinion is prevalent that the hypothesis of corruption as an exception no longer holds.¹⁶ The strategies for combating corruption, initially at national level since the end of the Seventies¹⁷ and the international measures¹⁸ of recent years have not been sufficient to stem the tide.¹⁹ In addition it should also be noted that the sums paid in bribes in sport seem to be relatively lower than in other areas, where meanwhile a level of 30% of the value of the contract to be acquired has been reached (Müller, 2002, 492 and 495). Finally, in the public opinion (at least in Germany), as politics, business and administration (see Fig. 1).

¹⁴ The figures for criminal charges (and hence the level of crimes registered) are, according to the relevant estimates, 4 – 6% for shoplifting, just under 50% for robbery and related crimes and a mere 10% for rape and sexual assault, cf. Pfeiffer, Brettfeld and Delzer (1997, p. 1 et seq.)

¹⁵ For a description of the problematic conditions in South American football, where it is sometimes difficult to differentiate between corruption, systematic distortion of competition, blackmail and fraud, cf. Duke and Corley (2001).

¹⁶ Cf. for example on corruption in Germany Rügemer (1996, 328-331). For an overview on the basis of various internationally comparative indices of corruption cf. Bardhan (1997, 1343 et seq.) as well as Ades and Tella (1999, 986) for further indices. Cf. Tanzi (1998) for a discussion of the problems of quantification.

¹⁷ The most important measures in this respect were the 1977 Foreign Corrupt Practices Act passed by the US Congress (cf. Sporkin, 1998) and which makes bribery by US firms abroad a punishable act (which however was watered down again in 1988, cf. Bardhan, 1997, 1337) as well as the OECD's 1994 resolution on "Recommendations on corruption in international commerce" (e.g. International Chamber of Commerce/ Deutsche Gruppe, 1998). For an overview of the international measures cf. Mills (1999) as well as OECD (1999).

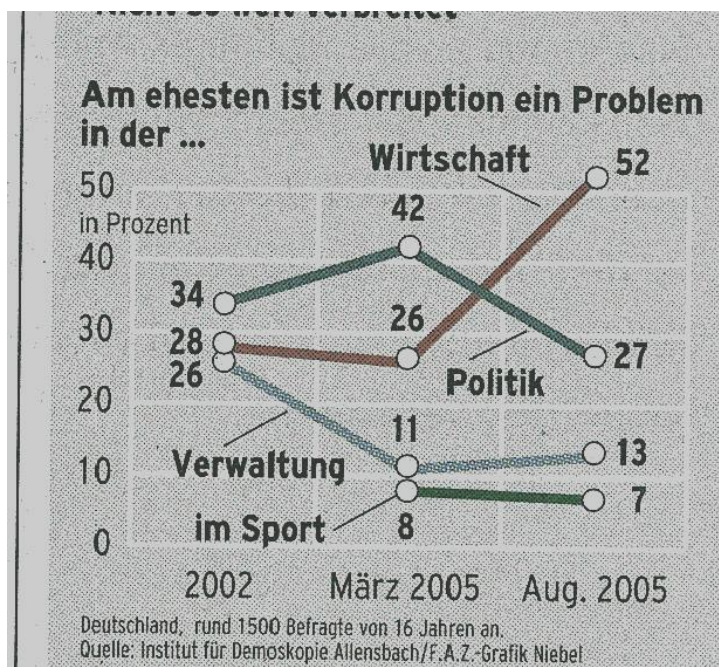
¹⁸ Cf. Brademas and Heimann (1998) as well as the International Chamber of Commerce's Code of Conduct (International Chamber of Commerce/ Deutsche Gruppe, 2000).

¹⁹ For an historic overview of corruption cf. Noonan (1984). On the need for further action in the future cf. Kaufmann (1998).

In view of the many sporting events that take place every day throughout the world, the number of proven cases of corruption in sport can be put into perspective, even if the considerable percentage of unknown cases are taken into account. By the way: even the extent of corruption at the IOC discovered in the late Nineties can be relativised.

Following intensive internal investigations, just under 10% of the members of the IOC were either cautioned or punished (within the space of one year). The overwhelming majority of the approximately 100 members behaved correctly. To round off the picture it should also be said that the charges brought by the US Department of Justice against the former heads of the Salt Lake City bids committee, Tom Welch and Dave Johnson, were dismissed by a Federal Court in Utah. The subsequent appeal led to a “first class” acquittal for Welch and Johnson. Summing up, Judge Sam said that: “...a reasonable jury could not find beyond a reasonable doubt that either defendant Welch or defendant Johnson had the required intent to promote, manage, establish, carry on, or facilitate any unlawful activity. Moreover, there is insufficient evidence for a reasonable jury to find that these defendants violated elements of Utah’s commercial bribery statute...” (N.N. 2003). In the most famous case of corruption in sport, was there no case to answer after all?

Fig. 1: Corruption in sport of subordinate meaning?



Source: Frankfurter Allgemeine Sonntagszeitung, may 21st, 2006

- There is no proof that corruption in sports has increased in frequency over recent years. It is equally possible that merely the level of public awareness for the subject has

increased. Even if the economic analysis of corruption has indeed revealed factors that could have led to an increase in corruption over the last decades (Maennig 2002), we should also take into account the fact that the improvements in archiving and international communications technologies during the same period mean that information on corruption in sport is also more readily available. In any case, no clear empirical evidence for the thesis of increased corruption in sport has been produced so far.²⁰

In connection with the subject of “developmental trends in corruption in sport” or that of the “unreported cases”, both the 1988 boxing scandal and the above mentioned (alleged?) IOC scandal in the Nineties are of interest. The boxing scandal was documented by the State Security Service (Stasi) of the former East Germany, but only came to light when the documents were made accessible to the public after the demise of the East German state. Also, as far as the scandal around the 2002 Winter Olympics is concerned, accounts suggest that the US Olympic Application Committee was neither the first, nor the only Olympic body to be involved in such activities. The problematic behaviour of certain IOC members had started to become public knowledge by 1991 at the latest, when applications were under way to host the 2000 Olympics and dossiers began to surface concerning the alleged proclivities and wishes of IOC members.²¹

- It is evident that in comparison to the advantages or utility transfer achieved by the corrupt behaviour, the actual level in money terms of the bribes used to achieve these ends is relatively low. This corresponds to the usual observations on corruption (Tullock 1980; 1990) and refutes earlier theoretical works on “rent-seeking” (e.g. Krueger 1974), which assumed, that via a process of competition the rents were completely transferred to payment of bribes. Clearly there exist entry barriers, transaction costs, risk appraisals and coordination problems in the “rent-seeking” sector which prevent the full uptake of the rents by corrupt officials (Rasmusen/Ramseyer, 1994).

2 Causes and costs of corruption in international sports

The intentional or negligent perpetration of an illicit activity, which may even include the most serious infringements of legal and/or moral norms, can generally be regarded as a choice

²⁰ On the question of whether corruption in general is globally on the increase, or whether it is just the public’s perception of it which has changed, cf. Tanzi (1998, 4 et seq.).

²¹ Cf. in detail Fuchs (1999).

made by an individual in the face of a number of legal and illegal alternatives for action, whereby the course of action is chosen which promises the greatest expected net utility for the individual at the time of deciding. The microeconomic modelling which regards the individual's weighing of the alternatives of illicit behaviour and legal activity as an optimisation of behaviour under specific given constraints, is essentially based on the seminal paper by Becker (1968). A microeconomic calculation of this type makes it possible simultaneously to take into account such apparently fundamentally different behavioural determinants as additional income, moral qualms and short and long-term health risks (Bourg, 2000). Within the framework of this model the rational calculation can be based on the assessment of the corresponding net utility:

$$(1) \quad E(U_i^n) = (1-p_i)[U_i(p_j Y_i - DC_i - POC_i) + p_j NPB_i - NOC_i] + p_i[U_i(-F_i - DC_i - POC_i) - LR_i - NOC_i],$$

where $E(U_i^n)$ is the expected net utility of an illicit behaviour of an individual, and p_i is his or her probability of conviction with $0 \leq p_i \leq 1$. p_j is the probability of "success" of the illicit behaviour with $0 \leq p_j \leq 1$. This last variable does not show up directly in Becker (1968), although it is worth being treated here. For example, in the case of corruption in the IOC, because of secret voting²², the briber can not be absolutely sure that the recipient will vote for him – and that enough other members will vote for him to reach the necessary majority. As long as the briber can not fully control his success, $p_j < 1$.

²² Decisions in the IOC are generally taken by absolute majority of the votes cast, http://www.olympic.org/ioc/e/facts/charter/charter_ioc_e.html. If none of the candidate cities achieves such an absolute majority, the cities which receive the least number of votes are successively eliminated in subsequent rounds of voting, until one city achieves an absolute majority.

U_i is the utility function of the individual, Y_i the gross pecuniary income from “successful” cheating²³, DC_i the direct cost for the preparation and realisation of the illicit behaviour, including the costs of self-protection to escape detection, conviction and punishment.²⁴ POC_i are the individual’s pecuniary opportunity costs, i.e. the pecuniary income of a legal behaviour which has to be abandoned on the occasion of illicit behaviour. NOC_i is the corresponding nonpecuniary opportunity cost. For example, a well-trained athlete will have significant benefits of pecuniary and non-pecuniary form training and competing even without doping. For a correct optimization of behaviour within a with-and-without analysis, the net “fair-play”-utility from prize moneys and honours (minus the costs in the form of the efforts of this strategy) have to be subtracted from the expected gross utility of illicit behaviour in both cases, i.e. conviction and no conviction. NPB_i is the non pecuniar utility from the illicit behaviour, such as e.g. (sporting) honours which may especially play a role in the case of doping.

F_i is the level of the financial penalty or the financial loss arising in the case of limited competition bans in the form of lost starting and prize moneys as well as reduced sponsoring incomes. LR_i is the loss of utility in the form of reputation in the case of conviction.

In (1) the expression in brackets after $(1-p_i)$ is the net utility for the individual in the case of non-conviction for his or her illicit behaviour, the expression in the brackets after p_i by contrast the net utility in the case of a conviction. An illicit behaviour will come about however, when the total expected net utility exceeds the individual disutility or non pecuniary cost from illicit behaviour NPC_i because of moral values, health risks and the like. NPC_i is assumed to be a constant for each individual. But as is true for all the other determinants in (1), these perceived disutilities may have different sizes for different individuals.

²³ As with all other variables, this variable takes into account not only changes caused by illicit behaviour in the present, but also in the future. In the simplest case for example, Y_i could be modelled as a payment flow of all present and future marginal gross incomes.

²⁴ Below we no longer differentiate between these three steps, but use the term „conviction“ synonymously.

The individual will only behave illicitly, if

$$(2) \quad E(U^n_i) > NPC_i,$$

i.e. when the net utility crosses a certain moral threshold. (1) und (2) help to understand why under equal frame conditions some individuals behave illegally, whilst others refrain from such activity. Thus for example an individual who is less educated and talented (and who hence has lower opportunity costs), is more likely, c.p., to chose an illegal course of action. Individuals with extensive moral qualms, i.e. greater NPC_i , reject illegal behaviour across a greater range of realisations of the other variables.

Finally it should also be noted that the variables do not necessarily represent objective data, but rather the perceived values, which may be subject to individual distortion. Hence according to economic calculations individually differing variables such as intelligence, age, education, wealth and family background are included in the explanation of whether an individual has recourse to illicit behaviour: "Some persons become "criminals", therefore, not because their basic motivation differs from that of other persons, but because their (percieved) benefits and costs differ" (Becker, 1968, 176).

Further insights result from (1) and (2) for the „supply“ of illicit behaviour during a given period (Ehrlich, 1996, 47). If for example all individuals have equal legal and illegal opportunities and also expect to incur equal penalties and efforts (i.e. if equation (1) were to be identical for all individuals), the supply of illicit behaviour will be determined by the distribution of ethical values in the population. If this distribution is bell-shaped, the total supply function for illicit behaviour is an increasing function of the actual net utility per offense. Even if the individual supply-of-offences functions are completely inelastic with respect to variations in net utilities above their critical treshold levels, the total supply curve is nevertheless in general elastic: changes in the net utility from illicit behaviour would cross the threshold of the marginal offender and thus induce her to enter or leave the "market".

Moreover we should also point out the costs of corruption to society, which can be divided into the costs of corruption from a narrower definition and the costs of combating corruption.

- Among the costs of more narrowly defined corruption we first of all find the costs of the victims. In the case of event corruption these are, for example, the unrealised gains in image, income and employment of those cities which were unfairly not selected. In the case of competition corruption they comprise the unrealised pecuniary and non-pecuniary benefits of the athletes robbed of victory, e.g. in the form of lost prize money and marketing profits as well as the missing victory honours.

However, this calculation of damages from an economic perspective should not be limited to the listing of lost utility gains to those robbed of victory for two reasons. When calculating the social loss of utility, the damage incurred by the non-victorious victims must fundamentally be set against the utility gains of the perpetrators (or the persons or institutions they represent as agents): instead of city A, city B is now hosting world championship Z, and instead of athlete A, athlete B is now the new champion. Only the balance of the utility gains enters into the calculation of social damages.²⁵ The pure transfer of utility on the base of the (illegitimate) redistribution is initially without relevance.

It could even be argued that in certain cases corruption can have an overall effect of increasing welfare: if an athlete or a team are prepared to be paid a sum of money to forego victory, they clearly estimate the utility from the additional pecuniary wealth to be greater than that of sporting victory. From the opposite point of view, the athlete providing the bribe clearly values the utility gained from victory higher than the loss of utility due to the reduction in pecuniary wealth. Hence both parties have utility gains.

Such ideas in the direction of relatively low social costs of corruption also exist in the discussion on corruption outside of sports. Here it is sometimes argued that corruption could increase the allocative efficiency of bureaucratic decisions, since in the long run only the wealthiest bidders can come up with the necessary bribes (Müller, 2002, 493). This should however be set against the argument that costs should also be taken into consideration that do not arise directly to the non-victors, but to the individual sporting disciplines or sport as a whole resulting from the intentional infringement of sporting values or from society's attitudes towards this illegitimate redistribution. The central function of sport is no longer fulfilled, the reputation of the sport is damaged, potential

²⁵ If however city B hosts the competition less efficiently, social losses arise at the level of the difference.

athletes (or the parents of youngsters considering a sporting career) turn their back on sport and sponsors cancel their support.²⁶ These costs arise at the latest in the medium term for the sport as a whole and the athletes. To this extent the term “victim” should not be limited to the athletes robbed of victory or the unfairly excluded host city applicants. On the contrary: the main part of the costs to the victims should be allocated to parties who are usually completely uninvolved. In the meantime the insight that from a macroeconomic perspective corruption is inefficient and has the effect of slowing growth, has also gained credence in the discussion on corruption outside of sport (ibid, 494).

Secondly the social costs of corruption in sport in a narrower sense include those incurred by the perpetrators during the preparation and enactment of their deeds. These may include the payment of bribes etc. mentioned above. Since these correspond to increases in utility for the recipients, from a macroeconomic perspective only the balance between the utility gain of the recipients and the monetarily induced utility loss of the providers of the bribes needs to be taken into consideration. To this should be added the losses caused by the working days lost by the perpetrator and other expenditure of resources during the preparation and enactment of the deed. In the case of corruption these costs may be low. However, in the case of occasional corruption in the nomination of host city for the Olympic Games for example, several factors point towards a situation in which, in addition to the normal focus of work on topics such as competition venues, financing, security, etc, the question of the appropriate “promotion” has taken on a considerable role in the work of the bidding committees.

- As far as the costs of the measures to avoid corruption are concerned, this is initially a question of private avoidance costs. These could include, for example, “voluntary” non-participation by institutions and athletes in potentially corrupt competitions, the use of detective agencies, etc.. However, in the real world of sports such measures are probably of less importance.

Of greater significance are the costs of avoiding corruption incurred by public or semi-public institutions such as international sporting bodies. Hence costs arise for the revision of competition rules and the development of sports laws (e.g. in the form of costs for courts of arbitration). Both of these areas of work have come to take up a

²⁶ In the case of the 2002 Winter Olympics, which we shall discuss below, the perpetrators themselves felt the effects of the reduction in support by sponsors, when Johnson & Johnson withdrew from a contract worth 30 million US-\$ (N.N. 2003d).

considerable part of the work of sporting associations, even if the effort is admittedly not exclusively directed towards avoiding corruption, but also towards other problems such as doping.

- Finally, the social costs of punishment need to be considered. In the case of prison sentences, a form of punishment rarely selected among the cases listed in Table 1, these include the cost of imprisonment and possibly also probation or parole costs. Both here and in other forms of punishment, the mental suffering of the guilty parties and their loss of income should also be taken into consideration. Income losses can occur not only during imprisonment, but also afterwards, due to greater difficulties in finding a job.

This having been said, an optimal anti-corruption policy in sport has to fulfil two central demands (Maennig, 2002):

- From an economic viewpoint, as far as the optimal extent of measures to combat corruption is concerned, the measures should be expanded as long as their marginal costs do not exceed their social marginal utility (in the form of costs saved in the narrower sense such as costs to the victims and the costs of perpetrating the deed). In the literature on general delinquency this state of affairs leads to the conclusion that it should not usually be society's goal to lower the rate of delinquency to zero (Becker, 1968). In other words, from an efficiency-oriented point of view, there is certain level of delinquency that can be considered optimal, or, more generously speaking, tolerable.
- As far as the composition of the anti-corruption measures is concerned, they are to be used in such a way that the relation of their individual social marginal utility is identical to their social marginal costs. Even if for example one measure is twice as effective as another (or, more precisely, has twice the level of marginal utility), the measure can only be used only for as long as it gives rise to marginal costs below a level twice as high as that of the other measure. From an economic perspective, the necessity that becomes clear from this formulation to relativise the effectiveness ("utility") of the measures with their costs is of central importance for the efficiency-oriented fight against corruption in sport.²⁷

²⁷ These considerations lead Becker (1968) to argue in favour of punishing criminal behaviour by fines wherever possible and appropriate. The deterrent effect (particularly in financially motivated crimes) can be considerable, the victims can receive compensation and the state is largely spared the costs of imprisonment and probation.

3 Anti-corruption measures in modern sport

3.1 Technical monitoring of the performances of referees: The case of the Amateur International Boxing Association (AIBA)

At the Olympic boxing competition in Seoul 1988, referees received bribes amounting to around U.S. \$5,000. The person most affected was the American super-middle-weight Roy Jones, already mentioned above in another context, who “only” won silver behind the Korean Park Si-Hun (Boxen.com o.D.; Jennings, 2000; Townsend, 2002). The IOC subsequently threatened the Amateur International Boxing Association (AIBA) with cancellation of the sport of boxing from the Olympic program unless there were drastic improvements in the assessment of performances of boxing referees (cf., also in the following, Bastian 2006). As a result, at the World Championships in Moscow in 1989, the AIBA introduced an electronic assessment system (boxing points machine) for all top-level international competitions, which has since been modified several times and in the meantime has also made an entrance at the national level. In this system, five referees placed around the boxing ring (see Fig. 2) register each hit. A hit only counts if it is registered by at least three of the five referees within a second. A video control system, which records the contest from all four sides at the same time as the boxing points machine (Fig. 3), makes it possible to check the accuracy of each given hit retrospectively. All of the activities of the referees are subjected to statistical analysis; the protocol for obtaining the result is immediately and unalterably available after the end of the contest.

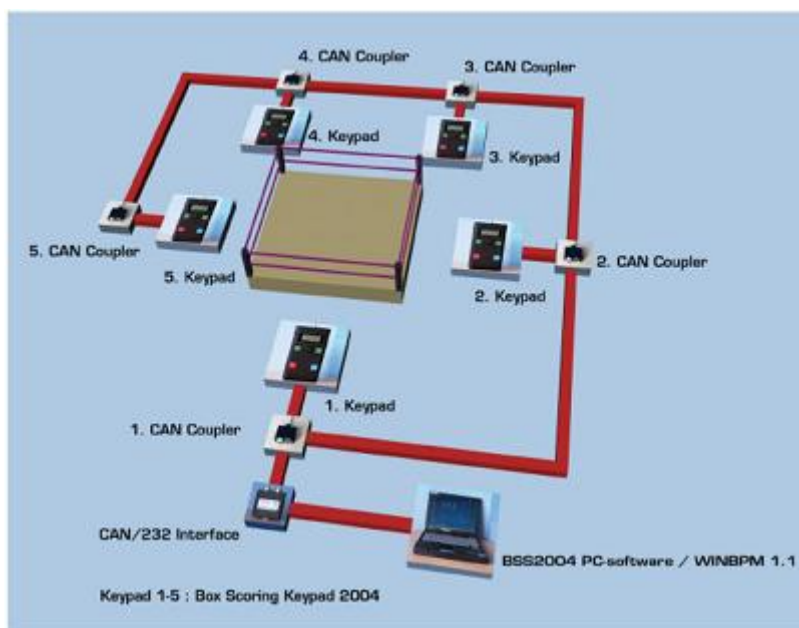
Of particular significance is that the software evaluates the referees simultaneously. As soon as cases arise in which one points judge has decided contrary to the other four, the evaluation criteria are the degree of difference between the individual points/score and the accepted score (evaluated score), the difference of the individual score from the total score (outcome of the contest), and the percentage deviation of the individual score from the mean of the scores of the five referees. The software calculates the performances of the referees in “real time” and automatically issues “cautions” and “warnings” in the event of deviant behaviour of a referee (cf. Fig. 4). The weighted number of cautions and warnings, divided by the number of contests refereed, has been brought in as a numerical measure^{28,29} of the quality of a referee. A

²⁸ The formula is: $(\text{cautions} + 4 \times \text{warnings}) / \text{number of deployments as referee}$.

²⁹ Information supplied by e-mail, as for the rest of the paragraph, by Mr. Michael Bastian, Project Leader in Boxing, Institute of Applied Training Science, Leipzig, 1. and 7.11.05.

value of 1 to 1.5 is regarded as “standard”; over 2 is regarded as “very poor”. Neither the referees nor their colleagues are informed of their assessment. However, in the event of poor performances, they will be immediately suspended from further contests by the referees’ commission of the Amateur International Boxing Association (AIBA). Such an action was, for example, put into practice at the 2004 Athens Olympic Games. Gross inappropriate behaviour can also lead to a longer ban from duty (1–2 years, or sometimes a lifelong ban).

Fig. 2: Overview on the technical equipment of AIBA electronic assessment system



Source: Bastian (2006).

For the sake of completeness, it should be mentioned that the respective referees are provided with a normal expense allowance (just like athletes/trainers/officials) from their own countries that delegate them. As a rule, this daily allowance (minus the cost of hotel meals) tends towards zero. At Olympic Games, referees nominated by the AIBA (like all other referees in other sports) receive a flat-rate expense allowance of €50 per day. For this, the referees had to be on part-time duty for more than 8 hours per day.³⁰

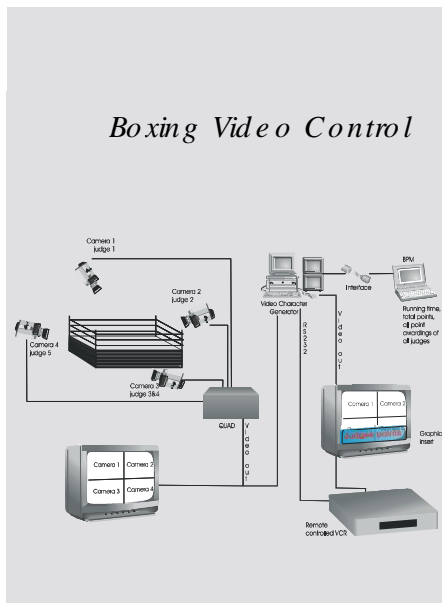
In summary, it may be emphasized that in their anti-corruption efforts the AIBA have relied stringently on the technical monitoring of the decisions of referees and have thereby achieved a greater transparency of the decisions.³¹ In many respects, the measures of the AIBA

³⁰ Information supplied by e-mail by Michael Bastian, 22.11.05.

³¹ For critical remarks concerning the system, cf. Bastian (2006).

resemble those of the ISU International Figure-Skating Union,³² who fundamentally changed their rich-in-tradition scoring system³³ following the scandal surrounding the Olympic figure-skating at Salt Lake City in 2002.³⁴ Meanwhile, video evidence has also been introduced in German ice-hockey (Leydenberg, 2005).

Fig. 3: Video control system in amateur boxing



Source: Bastian (2006)

³² For a description of the new assessment system, cf. ISU (2005).

³³ For criticism of the reform of the evaluation of figure-skating, cf. N.N. (2005c)

³⁴ Cf. Maennig (2005).

Fig. 4: Frame of the results in the evaluation of referees

Requirements to Judges AIBA new / [XXXIII EUROPEAN BOXING CHAMPIONSHIPS]

BoutNr: 130 Date: 000518 Event: 16
 Weight: 75 Time: 18:30
 Finaltyp: 2 FinalNr: 1

all Bouts

Bozic, Stjepan Ruokola, Juha
 CRO FIN

Winner: Bozic, Stjepan CRO PTS

Referee: Constantinescu, Nicolas ROM

Judges:	Soudakov, Ev	Parshin, Serg	Hasetci, Ali	Becsei, Karol	Jakubik, Miroslav	Total Score
	RUS	BLR	TUR	HUN	SVK	
IPoints	12 : 8	20 : 9	14 : 12	11 : 5	13 : 16	
Acc Points	6 : 5	7 : 2	6 : 3	8 : 3	5 : 5	10 : 5
1. IPoints/Acc Points	50 : 52	35 : 22	42 : 25	72 : 60	38 : 31	%
2. IPoints<Total Score						%
3. Points<Total Score	120 : 160	200 : 180	140 : 240	110 : 100	130 : 320	%
4. Total Score = 0						
5. 4:1/3:2					Caution	4:1
Red/Blue Class	OK	OK	OK	OK	OK	C
Total Class	OK	OK	OK	OK	Caution	

Caution
Warning

1 Seek
Litttools Print
Close

Start SpeedProject's SpeedCom... Bpm 10.41

Source: Bastian (2006)

3.3 A ban on betting as a central anti-corruption measure: The example of the German Football Association (DFB)

The game manipulation (match-fixing) and betting scandal in German football (Case 7 in Table 1) led to an extensive reappraisal, through both the sports jurisdiction of the DFB and the law courts. In the context of this revision, prominent figures, such as the referee Robert Hoyzer and the main fraudster Ante Sapina were sentenced to prison terms of 29 and 35 months, respectively (N.N., 2005e). The German Football Association expelled Hoyzer and his affiliates. Hoyzer has to pay 126.000 € compensation for losses suffered by the German Soccer Association (N.N. 2008). Other referees and several players were temporarily banned. Further referees who have come under suspicion have, for the time being, eluded the jurisdiction of the DFB through withdrawal from the members' union.³⁵

Besides, the DFB carried out a sports-political reappraisal. At an extraordinary meeting on 28.04.2005, less than 100 days after the scandal became known, the DFB decided on a series

³⁵ Cf., for details, Koch (2006).

of appropriate proposals, among other things, to rule changes (cf., also in the following, DFB, 2005 a and b, as well as Koch, 2006).

Thus, the concept of game manipulation (match-fixing) was defined (influencing of the course or the result of a match through deliberately wrong decisions in order to obtain advantages for oneself or others) and was established as a specific standard criminal offence and as a ground for objection in sport. Moreover, a direct and indirect ban on betting was imposed for players, trainers, and officials for games in which they were involved. For referees, a ban on betting was enforced for all games in leagues in which they were active.

Moreover, the DFB and the German Football League (DFL) held a meeting with numerous European bookmakers and others offering bets, which ended with the assembly of a new early warning and reaction system, the agreement to exchange data, and the founding of an association of the parties involved. In the end, a motion was passed for the introduction of individual football bets from the 2006/2007 season, but this has not hitherto been implemented.

Again for the sake of completeness, the (unchanged) payments of referees of the DFB or DFL should be looked into, which are summarized in Tab. 1. As regards the 20 referees of the 1st Bundesliga, this remuneration, calculated over a season, yields an average five-figure sum in euros.

Tab. 1: Remuneration of referees in the DFB, in € per game

	Bundes- liga	2. Bundes- liga	home club in Bundes- liga	Cup games home club in 2. Bundes- iga	home club in amateur leag
Referee	3068	1534	3068	1534	767
Referee's assistants	1534	767	1534	767	383,5
Fourth official	750		750	375	187,5

Source: DFB, written communication from lawyer Goetz Eilers, as of 10.10.05.

The increased use of technical means for checking the conduct of referees has (in contrast, for example, to the AIBA and the ISU) not be realized, although it would be technically conceivable. With mini-transmitters in the football and in shin pads, in conjunction with 3D location systems and a video recording, automatic verification of goals and signalling of offside as well as the immediate correction of wrong decisions and objectification of the

referee's decisions would be possible (Whitfield, 2002; Miller, 2003). These technical aids have already been employed at the under-17 football World Cup, which ran from 16.9. to 2.10.05 (N.N., 2005a).

The central role of a ban on betting in anti-corruption measures is also known from other ball-sports leagues. Thus, the Italian Football Association, which has long been a victim of betting scandals (Schümer, 2005), has recently agreed to an extensive ban on betting with threats of bans of up to 1½ years (N.N., 2005d). Also, in U.S. college sports, which have been affected by betting scandals for decades, bans on betting are the central countermeasure.

3 Conclusions and summary

Corruption already existed at the time of the “good old” Olympic Games of the Antique Era. And it continues to exist in modern competitive sport. Yet even if a considerable level of undiscovered cases are taken into consideration, there is still no proof that corruption in sport is on the increase or is more widespread in sport than corruption in other areas of human endeavour.

This relativisation should not be taken as a plea for less stringent measures to combat corruption in sport. On the contrary, a number of factors indicate that the general insights gained from the economy of delinquency, whereby the optimal level of delinquency does not have to be zero, is not necessarily applicable in this general form in the case of corruption in sport. Indeed, one case of corruption alone can cause significant social marginal damage, since in general it may result not only in a considerable loss of image for the perpetrator, but also for the sporting discipline as a whole and even for sport in general, and may not necessarily stop at the borders of the individual country involved.³⁶ For example; the damage incurred by world sport as a whole from the allegations of corruption against the IOC is particularly striking. Moreover, an analysis of the measures already undertaken by sports associations and the potential further measures resulted in the conclusion that the social marginal costs of avoiding corruption in sport could be kept relatively low, given a skilful combination of measures. The calculation that the fight against corruption should be extended until its social marginal costs correspond to its marginal utility, should result in a rate of corruption that differs only insignificantly from zero.

³⁶ Strictly speaking this only applies when the corruption is made public. This explains the hesitation on the part of some sports associations to publicize cases that have been discovered.

However, the central general economic insight remains that when a policy mix of anti-corruption measures is composed, the relation of the marginal utility of the individual measures to their marginal costs for the measures as a whole must be identical. In other words, anti-corruption measures with relatively high social marginal costs should be replaced by more cost-efficient alternatives.

From this perspective, economics offers a number of approaches and insights to help improve the sports associations' existing attempts at combating corruption. Thus, international sport can be congratulated on having taken anti-corruption measures which were quick enough in most cases and which for the most part pointed fundamentally in the right direction.

Nevertheless, an economic analysis of corruption and the fight against it suggests that for example that the ban on betting on US college sport and the travel ban for IOC members are inefficient, because other measures exist that incur lower marginal costs of corruption avoidance. The anti-corruption measures that are particularly meaningful from an economic point of view include the following.

- The creation of clear codes of conduct, with unambiguous definitions of undesirable (and punishable) behaviour,
- Reducing surpluses accrued by host cities from hosting major sporting events by allowing the sporting family a greater share of the financial advantages. This surplus reduction should be carried out until the number of applicants drops significantly. Applicant cities from poorer countries could be targeted for subsidy by the international sporting family.
- Making the procedure for the selection of sporting venues more transparent, as well as introducing freedom of information acts in sport.
- Creating financial incentive mechanisms for athletes and officials which have the effect of increasing the opportunity costs of corruption and which provide them with official recompense for their actions at a level greater than the usual market wage for comparable activities.
- Increasing controls and introducing tougher penalties. In addition to the exclusion from sporting activities already practiced by most sports associations and discussed in Section 1, the effectiveness of higher fines ought to be tested.

With regard to the last two points, it will admittedly take a while until such strategies become acceptable to the public and consequently become practicable for the sports associations.

In the run-up to the election of the IOC president in July 2001, the aforementioned Un Yong Kim and Prince Willem of The Netherlands are supposed to have suggested that IOC members should receive an annual expense allowance of U.S. \$50,000 for their role as ambassadors of the IOC in their countries.³⁷ The suggestion clearly diminished Kim's chances for the post of IOC president, since he was felt to be corrupting (in the sense of influencing the election of the president in his favour). Even the ethics commission of the IOC became occupied with the affair (N.N., 2001).

With regard to the call of the FIFA president Sepp Blatter to pay referees €100,000 per annum (o.V, 2005h), the newspaper "Der Tagesspiegel" commented on its front page: "Only the German civil service can come up to the high standards demanded by Blatter. Classified in the salary group B8 (ltd. Strafraumdirigent="director of the penalty area"), and equipped with secretaries, planning staff, accident insurance, and pension arrangements, he (the referee) will be a mighty bastion against all the temptations that his difficult profession has in store. The disadvantage: before every shot at goal there will be a few forms to fill in. With copy. However, our strikers will have to get used to it one day" (N.N., 2005b).

Also, higher fines may be regarded as inappropriate by many sports enthusiasts.³⁸

Nevertheless, a look back to antique sport nevertheless demonstrates that the idea is far from new. In the classical Olympic Games, corrupt athletes were sentenced to stringent fines and were obliged to finance the construction of so-called "pillars of shame" ("zanes"), which were positioned at the entrance to the Olympic Stadium. These pillars were crafted from the finest materials by famous artists and cost a fortune, ensuring a high pecuniary penalty. If the athletes were unable to pay, their home town had to pay in their place. The pillars were built "for all eternity", and their remains can indeed still be seen in Olympia today. The inscriptions contain the names of the corrupt athletes, their crimes and a moral lesson: in addition to the pecuniary loss, the delinquents bear a loss of reputation that tends towards the infinite.

³⁷ Members of the IOC presidency receive U.S. \$1,000 per conference (irrespective of how long they last); normal IOC members receive U.S. \$150 per day for the annual session. The International Football Association (FIFA) pays the members of its presidency U.S. \$50,000 per annum. Council members of the International Amateur Athletics Federation (IAAF) receive U.S. \$300 per conference or per day, cf. N.N. (2001c).

³⁸ This is particularly true when they are intended as a substitute for competition penalties and hence are interpreted as athletes "buying their way" out of trouble. Financial penalties should thus be issued together with competition penalties.

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